

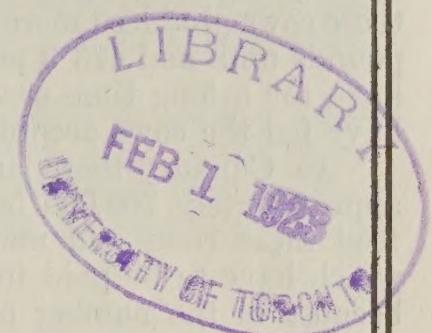
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IS COW TESTING WORTH WHILE?

By A. H. WHITE, B.S.A.,
Senior Dairy Promoter



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IS COW TESTING WORTH WHILE?

The president and manager of a company owning and operating a large dairy farm with a milking herd of about one hundred and thirty cows, recently wrote a letter to the author expressing appreciation of the value of dairy herd records. He says in part: "It puts us in a position to render to the people, who buy our surplus stock, a much better service than would otherwise be possible and it puts them in a position to realize that they are getting the value asked. The figures are interesting and enable us to appreciate the value of the cows we have."

This herd during the calendar year 1920 averaged 8,887 pounds milk and 284.2 pounds fat for all cows milked seven months or over. A great many of these cows produced more than 10,000 pounds milk and the high yield was 15,478 pounds milk and 473.3 pounds fat. The herd is paying well because the owners have for a long time used only pure bred sires of known producing strain and have fed the cows according to production.

In Canada, there are about 3,500,000 cows being cared for and fed on approximately 700,000 farms. It takes large quantities of forage and grain to feed these cows and many hours of labour are expended in caring for them which have to be paid for. Yet a great deal of this feed and labour is wasted because of the number of poor cows found in almost every herd as shown by dairy records. It is because of this fact and because these poor cows will remain undetected in our dairy herds unless records are kept of the production of each cow, that cow testing is being advocated for every dairyman as a common sense principle to be practiced in his business.

Much Improvement Possible

Although it is impossible to arrive at accurate figures of the average production for all dairy cows in Canada, careful estimates made from time to time place the average production at approximately 4,000 pounds milk and 150 pounds fat per year. The average production of cows recorded by the Dairy Branch in 1920, was 5,801 pounds milk and 214.1 pounds fat and the figures for certain associations are much higher. The average production for 963 cows in Ontario was 7,136 pounds milk and 245.8 pounds fat; while one centre had an average production per cow of 9,413 pounds milk and 335.6 pounds fat. Some herds, where cow testing has been in practice for several years have averages of over 11,000 pounds milk and as high as 371.3 pounds fat. Individual grade cows in these selected herds have produced over 15,000 pounds milk and 500 pounds butterfat; while official records of highly bred and selected pure-bred animals show such enormous yields as 37,000 pounds milk and over 1,200 pounds butterfat in 365 days.

When such differences in yields of individual cows are noticed, there seems to be considerable room for improvement in the production of the average dairy cow on Canadian farms.

Differences in Herds and Cows

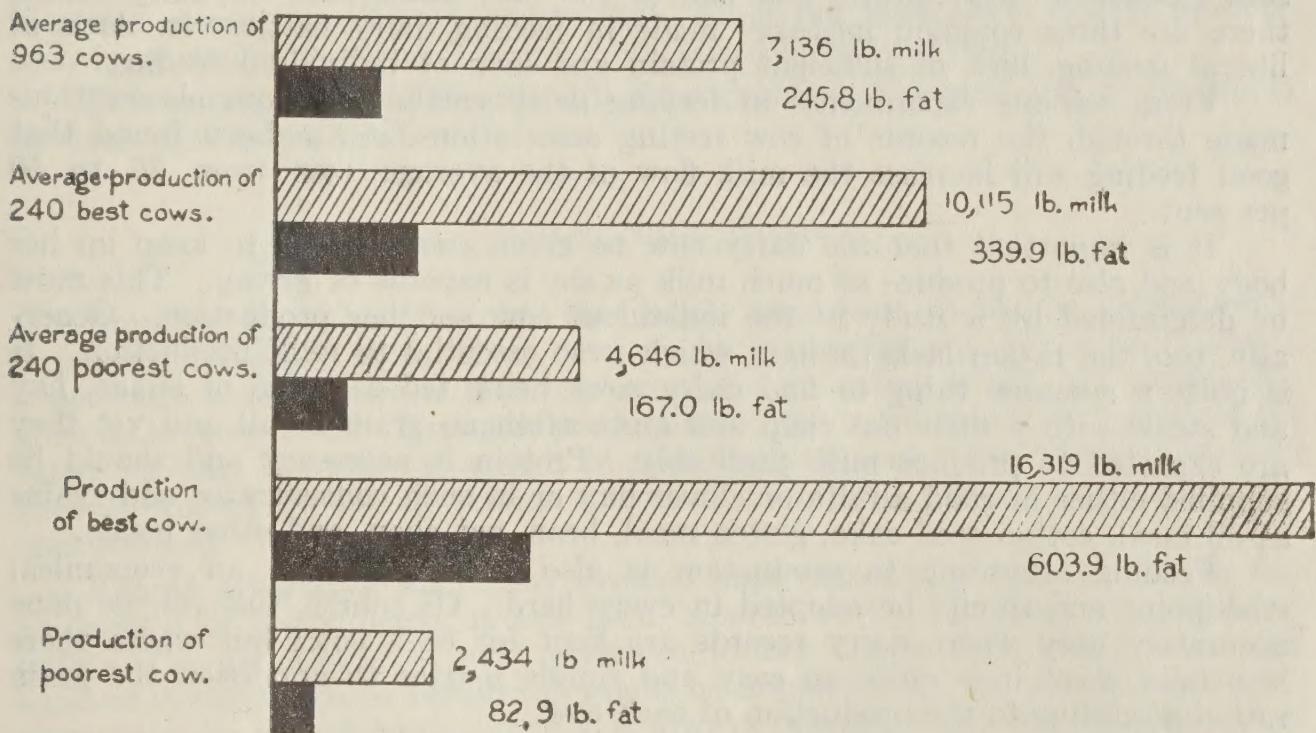
One of the chief reasons for keeping individual records of production is that all cows are not alike in their inherent capabilities for milk production. In a herd of cattle, there might be two cows very much alike as to size, age and general appearance; but when milk and butterfat yields, as shown by the scales and Babcock test, are compared a great difference is apparent. These differences in production exist not only between individual cows in the same herd but extend to entire herds in the same district.

In a certain locality there is a herd which had an average production per cow of 11,912 pounds milk and 379.8 pounds fat. Another herd of 18 cows in the same district and shipping to the same manufacturing plant had an average production per cow of 5,398 pounds milk and 192.3 pounds fat. There is also a big difference in the individuals in each herd. For instance, in the latter herd, the records show two cows both milking for the same length of time; one produced 8,169 pounds milk and 260.3 pounds fat and the other only 3,790 pounds milk and 173.8 pounds fat.

In the herd with the high average there are also differences between the individual cows, although not so marked. In this herd, cow No. 12 has a yield of 15,070 pounds milk and 503.5 pounds fat and cow No. 13 has 9,810 pounds milk and 334.2 pounds fat. But in this case cow No. 13 with 9,810 pounds milk to her credit is a profitable animal; while the profits for the cow with the record of 3,790 pounds milk are probably non-existent.

The accompanying chart of the records of 963 cows in Ontario shows graphically the differences in production of the individual cows. Furthermore, all poor cows are not found in a few herds in a few localities but are mixed with the good cows in nearly every herd. They can only be detected with certainty by consistent testing.

COMPLETE RECORDS OF 963 COWS IN ONTARIO 1921



Which line represents the average production of your herd?

Are you sure you do not own a cow like the poorest?

Cow testing will tell.

Importance of Testing for Butterfat

The butterfat content in milk is becoming a most important matter to the dairyman. It is generally recognized in the dairy business that milk should be bought and sold on a butterfat basis, thereby paying a premium for quality rather than quantity. The payment for milk on a butterfat basis has become such an important question that Provincial Governments have seen fit to pass legislation to make such method for payment of milk compulsory.

Thus, it is in the interests of every dairy farmer to test each individual cow for butterfat content of the milk and if low testers are found they should be eliminated at the first opportunity unless they are producing enough milk to make them profitable cows in spite of a low test. At the present time, the cow giving 5,000 pounds milk containing five per cent butterfat is more profitable than a cow giving 8,000 pounds milk containing only three per cent butterfat. For example, one cow in a herd produced 5,216 pounds milk and 306.5 pounds fat while not very far away, another cow produced 8,018 pound milk but only 259.0 pounds fat. It is not very difficult to determine which is the more profitable cow from a butterfat standpoint.

The difference in the butterfat content of milk cannot be detected except by the use of the Babcock test or other chemical tests of a like nature. In view of these conditions, the Babcock test is of the greatest benefit to the dairyman and gives the only true basis of determining the value and profitableness of the individual cow.

The Feed Question

The feeding of the dairy cow is a question which should be studied thoroughly by herdsmen and herd owners. Not only is it one of the most important means of increasing milk production but it also has a direct relation to the economical production of milk. According to Professor Eckles, of the Minnesota College of Agriculture, and one of the best authorities on dairy cattle, there are three common mistakes made in feeding dairy cattle, viz., lack of liberal feeding, lack of sufficient protein and lack of individual feeding.

From various experiments in feeding dairy cattle and from observations made through the records of cow testing associations, it has been found that good feeding will increase the milk flow of the average cow from 25 to 50 per cent.

It is important that the dairy cow be given enough food to keep up her body and also to produce as much milk as she is capable of giving. This must be determined by a study of the individual cow and her production. Generally, too, the ration lacks protein which is so essential to milk production. It is quite a common thing to find dairy cows being fed a ration of silage, hay and straw with a little oat chop and quite often no grain at all and yet they are expected to produce milk profitably. Protein is necessary and should be supplied either in good alfalfa or clover hay or in such concentrates and grains as oil meal, cotton seed cake, gluten meal, bran, oat chop, and other meals.

Feeding according to production is also necessary from an economical standpoint and should be adopted in every herd. Of course, this can be done accurately only where dairy records are kept for each cow; but where there is a milk sheet it is quite an easy and simple matter to apportion the grain ration according to the production of each cow.

The dairyman should consider his dairy cows as a market for his home-grown grains and roughages and should use the milk scales and Babcock test to select the very best cow-markets possible. Dairy records are the only means of studying these markets and are closely linked up with the feeding of the dairy herd.

Good Cows Most Economical Producers

It has often been proved that the high producing cow is a much more economical producer than the cow with a low yield. Recent surveys made of the dairy farming business have shown clearly that the good cow is the deciding factor in the labour income of the farmer. The following records will add to the bulk of evidence in favour of the high producer and are taken from a herd where the milk is weighed daily and where accurate records are kept of the feed used by each cow.

GOOD COWS *vs.* POOR COWS

Cow No.	Production		Value of Milk	Cost of Feed	Feed Cost per 100 lb. Milk	Feed Cost per lb. Fat	Profit above Feed Cost
	Milk Lb.	Fat Lb.					
2.....	13,083	452.2	466 74	148 81	1 13	0 32	317 93
3.....	15,206	522.1	538 24	148 87	0 98	0 28	389 37
6.....	5,717	218.7	202 92	84 60	1 48	0 38	118 32
8.....	5,032	168.5	169 48	76 04	1 51	0 45	93 44

These figures are for the two best and two poorest cows in the herd and are for the calendar year 1920, when prices for milk and feed were considerably higher than at the present time. However, it will be noticed that although it cost nearly twice as much to feed the good cows, they produced about three times as much milk and the best cow made over four times as much profit as the poorest cow.

The figures showing the feed cost per 100 pounds milk and per pound fat are also interesting, and in the case of the good cows are considerably lower than for the poorer cows. A further study of these figures proves the value of feeding according to production. If the poor cows had been fed as much as the good ones, there would have been a decided loss and if the good cows had only been fed as much as the poor cows they would not have been able to produce such large quantities of milk and profits would have been less.

Cow testing and feed records will show clearly the returns and profits made by each cow in the herd.

Better Bulls Needed

Breeding is without doubt the most important factor in permanently improving the dairy herd. Poor cows might be weeded out of the herd, but if a poor sire is used there is always a crop of poor calves which will eventually grow to be poor cows. The milk production of the cattle might be increased by better feeding, but there is a limit to such improvement. But where pure-bred sires of known producing strains are used, there is a steady and permanent improvement.

Almost invariably where any decided improvement has taken place in the production of dairy herds, it has been because of the influence of pure-bred bulls. The great bulk of milk produced to-day comes from grade cows and must of necessity do so because it would be impossible to get enough pure-bred cows to make up our herds. But it is always possible to get enough pure-bred sires to head the grade herds throughout the country and it would not necessarily have to be an outstanding individual to improve a great many of these herds.

In the past and at the present time, sires have been selected because of the known milking characteristics of their dams and sires, and testing has made this possible. In the future, however, more attention will be paid to the selection of sires because they have proven themselves in the milk production of their daughters whether they be grades or pure-breds.

Cow testing through the association plan is doing a good deal to save good sires for continued use in many localities.

Is Cow Testing Worth While?

In the minds of many farmers throughout the country, there is doubt as to the value of dairy records in connection with their dairy herd work. Some men think it takes too much time for the increase in production obtained. The improvement in the herd, however, depends upon the man himself and not on the mere keeping of dairy records, which can only serve to show the efficiency of each cow and thereby act as a guide for the dairyman to follow in his methods of breeding and feeding.

The man who has seen the production of his herd more than doubled in a few years' time or the man who has obtained big prices for surplus stock due to having records, will always answer "Yes" when asked the question "Is Cow-Testing Worth While?"

Below are a few extracts from letters received from men who have become interested in the cow testing scheme. All these men have seen substantial increases in production since they started keeping dairy records and have no doubt as to the value of the work when properly carried out.

"Would soon stop dairying, if I did not test."—J. G. W., Colborne, Ont.

"Much more than worth the slight trouble it takes."—H. G., Preston, Ont.

"It is a big help to a man to know which are the cows making the profits."—W. H. B., Northfield Station, Ont.

"It has greatly increased my interest in my cows and has made me realize the importance of feeding well."—D. H. L., Salmon Arm, B.C.

"Cow testing is the only method by which dairying can be placed on a business basis, therefore it is indispensable to the dairyman."—H. W. T., Lloydminster, Sask.

"Testing, to my mind, is the only accurate way of finding out what each cow is doing and though we weigh each cow's milk every milking, it takes very little time. I wouldn't go back on it for anything."—J. W. H., Strathcona, Alta.

"Cow testing opens one's eyes with a jerk. The most of us can improve our present stock by better feeding."—W. B. T., Wallace, N.S.

"A man who does not test is working in the dark."—S. C., Charlottetown, P.E.I.

"I think it is one of the most important phases of dairy farming."—J. H., Valcourt, P.Q.

"I think cow testing is a great help in selecting the good cows."—A. D. N., Kingston, N.B.

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